

Claims:

Sub  
Q7

1. A method for applying business rules to data,  
comprising the steps:

for each rule,

invoking the rule at the occurrence of each of a defined  
set of operations on the data,

identifying a predetermined trigger condition for the  
rule, and

processing the rule if the predetermined trigger  
condition is satisfied.

2. A method according to Claim 1, wherein the identifying  
step includes the steps of:

identifying at least one data value;

identifying a trigger value; and

identifying an operator indicating how the data value  
will be compared to the trigger value.

3. A method of applying business rules to data,  
comprising the steps:

for each rule,

6 invoking the rule at the occurrence of each of a defined  
7 set of operations on the data,

8  
9 identifying a predetermined trigger condition for the  
10 rule,

11  
12 invoking a predefined method if the trigger condition is  
13 partially satisfied, and

14 *Q1*  
15 using the method to determine a final result of the rule.

*Cont'd.*  
1 4. A method for managing business rules for data,  
2 comprising the steps:

3  
4 establishing a set of business rules, each of the rules  
5 including a trigger condition and a process;

6  
7 storing the rules in a table;

8  
9 performing a predefined operation on the data;

10  
11 checking all the rules in the table to determine if any  
12 are invoked by the predefined operation;

13  
14 for each rule that is invoked, determining whether the  
15 trigger condition of the rule is satisfied; and

16  
17 for each rule the trigger condition of which is  
18 satisfied, implementing the process of the rule.

1 5. A method according to Claim 4, further comprising the  
2 steps of:

1 running an application using the data; and

2  
3 changing any of the business rules without recompiling or  
4 reinstalling the application.

1 6. A method according to Claim 4, further comprising the  
2 step, upon rule failure, defining a message and help for  
3 each rule using visual programming techniques.

1 *07* 7. A method according to Claim 6, further comprising the  
2 *encl.* step, upon rule execution, adding the help and message to  
3 an error message list.

1 8. A system for managing business rules for data,  
2 comprising:

3  
4 means for establishing a set of business rules, each of  
5 the rules including a trigger condition and a process;

6  
7 a table for storing the rules;

8  
9 means for performing predefined operation on the data;

10  
11 means for checking all the rules in the table to  
12 determine if any are invoked by the predefined operation;

13  
14 means for determining, for each rule that is invoked,  
15 whether the trigger condition of the rule is satisfied;  
16 and

17  
18 means for implementing the process of each rule, the  
19 trigger condition of which is satisfied.

1 9. A system according to Claim 8, further comprising:

2  
3 means for running an application using the data; and

4  
5 means for changing any of the business rules without  
6 recompiling or reinstalling the application.

1 *Q4*  
2 *contd.* 10. A program storage device readable by machine,  
3 tangibly embodying a program of instructions executable  
4 by the machine to perform method steps for managing  
5 business rules for data, said method steps comprising:

6 establishing a set of business rules, each of the rules  
7 including a trigger condition and a process;

8  
9 storing the rules in a table;

10  
11 performing a predefined operation on the data;

12  
13 checking all the rules in the table to determine if any  
14 are invoked by the predefined operation;

15  
16 for each rule that is invoked, determining whether the  
17 trigger condition of the rule is satisfied; and

18  
19 for each rule the trigger condition of which is  
20 satisfied, implementing the process of the rule.

1 11. A program storage device according to Claim 10,  
2 wherein said method steps further comprise:  
3

4       running an application using the data; and

running an application using the data; and

5

5 07  
6 contd.  
7

6

changing any of the business rules without recompiling or reinstalling the application.

7

reinstalling the application.

add  
a7

[illegible]